

Written Statement of

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**Committee on Energy and Commerce,
Subcommittee on Telecommunications and the Internet
United States House of Representatives**

on

The Warning, Alert, and Response Network Act

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Summary of Written Statement of Vincent D. Kelly

As the nation's leading provider of paging services, USA Mobility is eager to play an integral role in the national alert system contemplated by the WARN Act. USA Mobility's paging services already provide a highly reliable, redundant, and affordable text-messaging solution to mission-critical emergency responders. We also have the capability *today* to broadcast emergency alerts to all of our text-messaging subscribers, using satellite-controlled transmitters. Moreover, our nationwide network can support alerting capabilities for other service providers, such as wireless voice carriers that cannot provide similar point-to-multipoint messaging.

USA Mobility's paging network has several key attributes that are ideally suited to emergency communications. Our network relies on satellites rather than the PSTN to link transmitters and switches, and therefore can maintain operations when telephone trunk lines and switches are out of service. In addition, our paging transmitters emit extremely powerful signals in a "simulcast" fashion, maximizing the network's geographic reach and in-building penetration. Paging devices typically run on a single AA or AAA battery and have a long battery life; unlike cell phones and PDAs, these devices are not affected by a loss of electrical power because there is no need to recharge them. While damage to a transmission tower usually will disrupt mobile telephone service, paging's use of simulcasting enables the delivery of messages to paging devices from other nearby towers. Paging also is a very affordable technology, which makes it suitable either as a primary communications tool or as a backup.

These strengths were clearly demonstrated during recent crises, including Hurricane Katrina and September 11. For example, the FCC's Independent Panel on the Impact of Hurricane Katrina on Communications Networks praised the exemplary performance of paging services during the storm and even called on federal officials to promote the use of pagers by emergency responders nationwide. During 9/11, the paging network remained operational when wireline and mobile voice networks became overloaded and could not complete calls.

USA Mobility seeks to leverage these strengths as a participant in the expanded national alert system. Our network will continue to serve as a critical tool for first responders, and we are ready, willing, and able to provide emergency alerts to all of our text-messaging subscribers. In addition, our network's broadcast capabilities might be best utilized in emergencies if the national mobile telephone carriers were to integrate our paging technology into their handsets. This approach seems to offer the fastest and most promising way to roll out a national alert capability to mobile phone subscribers, because mobile voice networks are not set up to broadcast alerts.

USA Mobility applauds the Subcommittee for its work on the national alert system, and in particular we endorse the working group approach taken by the WARN Act. Industry stakeholders and officials at all levels of government should collaborate on the development of technical interfaces, security procedures, and related matters. We also believe that the legislation's funding provisions are necessary to the deployment of a robust multi-platform system, and Congress should expand its funding of grants to emergency responders. Finally, any legislation should include liability protection for participating service providers.

**Statement of Vincent D. Kelly
President and Chief Executive Officer, USA Mobility, Inc.**

Chairman Upton and members of the Subcommittee, thank you for inviting me to testify on emergency communications and the Warning, Alert, and Response Network Act (“WARN Act”). My name is Vincent Kelly, and I am the President and Chief Executive Officer of USA Mobility, the nation’s largest provider of paging services.

USA Mobility strongly supports the WARN Act and applauds the Subcommittee’s efforts to promote public safety through the broader dissemination of critical, and often life-saving, emergency information. Paging services are ideally suited to this task. Perhaps the most important feature of our network *today* is the ability to broadcast messages to millions of Americans simultaneously utilizing a “group call” feature with our simulcast technology on a geographic zone-by-zone basis. While my company serves several million customers and is capable of transmitting alerts to our messaging subscribers in an emergency, our network’s broadcast capabilities might be best utilized in emergencies if other service providers—such as the national mobile telephone carriers—were to integrate our paging technology into mobile phones and similar devices, allowing information to be transmitted across multiple platforms simultaneously.

Our paging network also is extremely reliable, inherently redundant through simulcast technology, and very affordable. For these reasons, paging has proven particularly vital to mission-critical personnel such as first responders, doctors and nurses, and government officials. In fact, the FCC’s Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks recently recognized the exemplary performance of paging networks during Hurricane Katrina and recommended that paging carriers play an important role in any expanded alert system.

My testimony today will describe the unique strengths of paging technology, its proven record in emergency situations, and the role we are prepared to play in an expanded national alert system. Before addressing these issues, I will begin with some brief background information on USA Mobility.

Company Background

USA Mobility was formed in late 2004 by the merger of Arch Wireless, Inc. and Metrocall Holdings, Inc., then the nation's two largest independent paging and wireless messaging companies. I have been with the company and with its predecessor Metrocall for 19 years, and I understand well the communications issues that arise during times of emergency.

USA Mobility provides one-way and advanced two-way text-messaging services, as well as traditional numeric paging services. As of March 31, 2006, USA Mobility provided service to over 4.6 million messaging devices, out of a total of more than 8 million units industry-wide. While the mass market for paging services has declined in recent years as consumers have increasingly relied on mobile phones, our paging services continue to play a critical role for first responders, including police officers, fire fighters, and rescue workers. In addition, hospitals and health clinics, as well as government agencies, rely heavily on paging services. We also serve more than 80 percent of Fortune 1000 companies. Our paging networks, which include approximately 15,000 transmitters, reach more than 90 percent of the U.S. population with one-way service and over 80 percent with two-way service, encompassing the largest 100 markets.

Key Attributes of Paging Networks

USA Mobility's paging network is ideally suited to emergency communications based on several key attributes, including *reliability*, *redundancy*, and *affordability*. These attributes will strongly further the WARN Act's goals by ensuring the availability of a text-messaging

capability as a primary or back-up system for public alerts and facilitating communications among first responders in emergency situations.

Paging is one of the most reliable communications technologies on the market today. Our network architecture combines digital satellite transmission with an extensive system of terrestrial transmitters and paging switches. Because our narrowband PCS transmitters are controlled by satellites, our transmission network is far less dependent on the public switched telephone network than many other wireless systems—and thus far less vulnerable to outages during natural disasters and other emergencies. Satellite transmission also enables us to direct messages to multiple base-station paging transmitters within a geographic footprint in a “simulcast” fashion. Moreover, paging networks enjoy redundancy due to the benefits of this simulcast technology. Because paging messages are simulcast from multiple towers to each pager, damage to a single tower or even several towers does not necessarily interrupt the delivery of messages, as the pager might be able to receive signals from other towers in the area. Mobile voice networks typically lack this capability.

Another distinctive feature of paging networks is that our transmitter antennas are located on towers high off the ground (over 300 feet) and on the tops of buildings, and emit extremely powerful signals of up to 3,500 watts ERP. In contrast, most mobile phone transmitter antenna arrays typically are located 100 feet above the ground and emit significantly less powerful transmitter signals of 90 watts ERP. As a result of our unique simulcasting and high-power transmissions, paging signals can travel farther and penetrate buildings better than signals used by other wireless technologies. Additionally, many mobile phone outages result from damage to their large antenna arrays, in contrast to the resilience of the smaller antennas utilized by paging systems.

Paging devices are also very reliable. Unlike cell phones and PDAs, pagers typically run on a single AA or AAA battery and have a long battery life relative to other wireless devices. These battery-powered pagers are not affected by a loss of electrical power because there is no need to recharge them.

Moreover, paging devices and service plans are affordable, particularly relative to other wireless services. A typical paging service plan includes the cost of the paging device and still costs less than \$10 per month. This low cost continues to make pagers an attractive option for private employers and government agencies that need basic messaging capabilities, either for primary use or to back up their broadband services. The cost savings also benefit low-income consumers who cannot afford more expensive wireless communications services.

Performance During Hurricane Katrina and 9/11

The strengths of our technology were clearly apparent during Hurricane Katrina and 9/11. Hurricane Katrina disabled most communications networks in the Gulf Coast region, but paging services remained operational in many areas while other networks failed. USA Mobility's network was fully operational within two days in the areas hardest hit by the storm (most wireline and wireless providers required far longer to restore full service). Several of our customers reported that paging services provided their only link to the outside world, as they could not use wireline or wireless telephones. For example, as an employee at Women's Hospital and Tulane Lakeside Hospital reported:

Pagers were used by Medical Staff for communicating with the doctors and nurses in transporting the Mom's and Babies from one facility to another. Text messaging was the only way to get critical messages out to the doctors and nurses since phone lines were all down or all circuits busy.

Similarly, Carter C. Blumeyer, a Communication Specialist with FEMA during Hurricane Katrina, reported his experience with paging and the Reflex technology protocol we deploy on our two-way network to an industry newsletter:

I am with an Urban Search and Rescue for FEMA and with the cell and data service down and systems being flooded. . . . ReFLEX is working fine and communications are flowing through the units! We are allowing people to send e-mails to loved ones to let them know they are alive and well. Again the critical use of ReFLEX [has been available] in all the disaster situations I have been to (9/11 NYC, Ivan, Isabel and now Katrina!).

The recent report of the FCC's Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks validated this anecdotal evidence and commended the exemplary performance of paging services during the crisis. The Panel concluded that paging systems were more reliable than other networks because:

- “[P]aging systems utilize satellite networks, rather than terrestrial systems, for backbone infrastructure. Paging technology is also inherently redundant, which means that messages may still be relayed if a single transmitter or group of transmitters in a network fails.” (Report at 10.)
- “Paging signals penetrate buildings very well, thus providing an added level of reliability.” (*Id.*)
- “Additionally, pagers benefited from having a long battery life and thus remained operating longer during the power outages. Other positive observations concerning paging systems included that they were effective at text messaging and were equipped to provide broadcast messaging.” (*Id.*)
- “[G]roup pages can be sent out during times of emergencies to thousands of pager units all at the same time.” (*Id.*)

Because of the remarkable reliability of the paging network during Hurricane Katrina, the Panel repeatedly recommended that emergency responders rely on pagers as a primary or back-up communications system in future emergencies. The Panel stated, for example, that the FCC should “[u]rge public safety licensees to familiarize themselves with alternative communications technologies to provide communications when normal public safety networks are down. Such

technologies include . . . two-way paging devices, and other technologies less reliant on the PSTN.” (*Id.* at 37-38) The Panel also called on the FCC to support Department of Homeland Security efforts to make emergency medical providers eligible for funding for emergency communications equipment and to expand the Emergency Alert System, *see id.* at 40, as the WARN Act seeks to accomplish.

Paging also performed exceptionally well during the tragic events of September 11, 2001. While the wireline and related wireless networks were quickly inundated with high call volumes and thus inaccessible for most people, pagers continued to send and receive data throughout the duration of the emergency. The superior performance of paging systems during 9/11 led industry expert Dr. Peter Kapsales to state that two-way paging “should be considered a primary or backup system to improve real-time communication among emergency personnel during critical periods when voice communication is not practical or fails.”

Paging Should Be a Central Component of the National Alert System

As this past performance demonstrates, USA Mobility and other paging carriers can leverage the benefits of their networks as participants in the expanded national alert system. There can be no legitimate debate about the value of enabling people to receive alerts over as many communication platforms as possible, as the WARN Act proposes. Nor is there any doubt that wireless technologies in particular should play a key role in the national system. Our society is going wireless. Although it is important to reach the television and radio audiences with emergency information, a growing number of citizens rely on wireless networks to receive information (and, of course, to communicate with others). As of 2005, there were more than 185 million mobile telephones, and more than 8 million paging devices, in service. Sending

emergency information to wireless devices is especially important if people are on the move during an emergency, or if televisions and radios are inoperable based on power failures.

While mobile phone providers at this point serve vastly more consumers than paging carriers, the superior point-to-multipoint capabilities of paging networks make paging carriers critical participants in the national alert system. The FCC's rulemaking on expanding the Emergency Alert System has focused largely on mobile phone providers' current *inability* to broadcast alert messages to large numbers of consumers. Mobile phone carriers have proposed short-term solutions based on short-message-services, which are quite limited in terms of message length and the number of subscribers that can be reached promptly. Over the next several years, mobile phone carriers propose to develop more robust broadcast systems capable of transmitting messages to large numbers of subscribers simultaneously.

In contrast, as I have described, paging networks already have this capability *today*. Broadcasting large numbers of messages does not cause bottlenecks in paging networks because, unlike voice networks, they are designed for this function. We are able to put this capability to use in the national alert system, so that our text-messaging subscribers can receive alert messages from local, state, and national officials. Our systems can be configured to transmit messages to targeted simulcast areas, to specific customer groups (such as emergency responders), or even to our entire base of text-messaging subscribers.

While our services are extremely important to our subscribers—including first responders and health care professionals in particular—a greater public benefit might result if other service providers integrated our paging technology into their own devices to take advantage of our extraordinary alert capabilities. For example, wireless voice providers could direct manufacturers to install paging technology in mobile phones. This relatively low-cost solution

would enable wireless carriers to transmit alert messages to a far broader audience as soon as new handsets are introduced into the marketplace. In addition, paging networks can readily support the transmission of alert messages to wall-mounted devices in consumers' homes, which could emit a tone or light up when an emergency message has been received. Such devices could even be detachable and portable so they would deliver the benefits of mobile devices during a crisis.

Specific Recommendations

USA Mobility believes that the WARN Act will strengthen emergency communications in a number of ways, and we commend the Subcommittee for convening a hearing. I want to highlight three aspects of the legislation that are particularly important and beneficial.

First, we strongly support the working group approach taken by the bill. As I have explained, USA Mobility's paging network is capable of broadcasting alert messages to a mass audience or to targeted areas and user groups. But the interface between our network and the officials responsible for issuing alerts has yet to be developed. In our view, the most efficient and effective way to establish systems and protocols capable of delivering messages to a wide array of technological platforms is to convene a working group as proposed in the WARN Act. The working group not only can develop appropriate transmission protocols but also can help establish appropriate authentication and validation systems to prevent misuse of the national alert system. As the nation's leading paging carrier, USA Mobility is prepared to play a significant role in the working group contemplated by the legislation.

Second, the legislation is necessary to provide funding for this initiative. To its credit, FEMA has undertaken an important pilot program, the National Capital Region Digital Emergency Alert System Pilot (DEAS-NCR), in which USA Mobility participated along with

public broadcasters and other entities. But the national rollout of an expanded multi-platform alert system necessarily will require additional resources. In addition to the funding proposed by the WARN Act, USA Mobility urges Congress to provide additional funding to the Department of Homeland Security to authorize grants to emergency responders at the state and local levels for the acquisition, implementation, and improvement of reliable communications systems, including paging services.

Finally, USA Mobility believes that any legislation must provide liability protection for communications service providers who participate in the national alert system. The threat of baseless lawsuits would have a chilling effect on participation by service providers, and broad participation is essential to the success of the initiative.

In conclusion, USA Mobility commends the Subcommittee and the sponsors of the WARN Act for their attention to this critical issue and we look forward to assisting in the development of a robust national alert system.